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## **ABSTRACT**

A video and sound signal broadcasting system applicable to railway carriages (1), equipped with terminals formed by television and sound screens, consisting of a transmitter head subsystem of the signal to be presented, a transmission subsystem responsible for sending the signal to the carriages and an on-board equipment subsystem, inside the convoy carriages. The head subsystem receives the signal, coded in MPEG 2 format and inserted in a Gigabit Ethernet telecommunications network, available in the metropolitan railway network, whilst the transmission subsystem consists of a broadcasting device (4) located in each station, consisting of three antennas: two one-way (2) at the mouth of each tunnel (5) and another omni-directional one (3) giving coverage to the station connected to the GigaEthernet network and the on-board subsystem on trains consisting of a reception and exchange control, power supply and TFT screens.